

DIVISION 16 ELECTRICAL

16400 ELECTRICAL

Part 1 – General

1.1 WORK

- A. Provide and install complete electrical service, power and lighting as listed in the **Scope** and as specified herein.

1.2 QUALITY STANDARDS

- A. Provide licensed, experienced, well-trained workers competent to complete the work as specified.
B. Unless approved by the **Inspector**, provide all related products and accessories from one manufacturer.
C. All work shall comply with manufacturer's instructions and the Wisconsin Electrical Code, Comm 16.

1.3 SUBMITTALS

- A. Submit a copy of the electrical permit from the City of Milwaukee to the **Agency** prior to starting any electrical work.
B. Provide manufacturer's specifications and other data to prove compliance with these **Specifications**.
C. Submit a list of materials to be provided for this work.
D. At the completion of this work, provide copies of manufacturer's installation, maintenance, and any warranty information to **Owner**.
E. Owner Selection Sheet:
 - Do not start work until **Owner** has approved product/style/color selections in writing (See Appendix A).
 - Provide **Agency** with a completed and signed Owner Selection Sheet.

1.4 PRECONSTRUCTION AND PREPARATION

- A. Examine and verify that job conditions are satisfactory for speedy and acceptable work.
 - Maintain an up-to-date copy of the **Scope** on site.
 - Confirm that there is no conflict between this work and the work of other trades.
 - Confirm that the work of other trades that must precede this work has been completed.

PART 2 – MATERIALS

2.1 GENERAL

- A. All materials must be new and of the type and quality specified. Materials must be delivered in labeled, unopened containers.
 - All electrical products must bear the Underwriters Laboratory label.
 - Reject and return any products or materials delivered in a damaged or unsatisfactory condition.

B. Store materials indoors, protected from damage, dirt, moisture, contaminants, and weather.

2.2 ELECTRICAL SERVICE

- A. Provide complete electrical service as listed in the **Scope** and as specified herein.
B. Service entrance cable, copper conductor, 600 volt insulation, type SE.
C. Main distribution panels: circuit breaker type, provide surface cabinet with screw cover and hinged door. Copper bus and ground bus, 110/220 volts.
D. Underground feeder and branch circuit cable, size 14 through 4 AWG, copper conductor 600 volt insulation, type UF.
E. Wiring, nonmetallic sheathed cable, size 14 through 4 AWG, copper conductor, 600 volt insulation, type NM.
F. Circuits will be as listed in the **Scope**, or as required by electrical code.

2.3 SWITCHES, RECEPTACLES AND WALL PLATES

- A. Provide complete switches, receptacles, wall plates and related materials as listed in the **Scope** and as specified herein.
- B. Wall switches, quiet operating switch rated 20 amperes and 110-220 volts AC. Color and switch type as selected by **Owner**. Wall dimmers, linear slide type, color selected by **Owner**. Rated for 600 watts minimum, size as per circuit.
- C. Receptacles, type 5-20 R, plastic face, color as selected by **Owner**. Specific purpose receptacles as listed in the **Scope**.
- D. Exterior weatherproof cover plates shall be gasketed cast metal with hinged gasketed covers.

PART 3 – CONSTRUCTION AND INSTALLATION

3.1 INSTALLATION

- A. Install products as per the **Scope**, state electrical code and these **Specifications**.
 - Straps and other support construction for electrical equipment must be as required by building code.
- B. Upon completion, secure all required inspections and approvals of the completed system. Make all required adjustments and corrections at no added cost.
- C. Provide for warranty of this work for one year following final permit approval by the **Inspector**.

3.2 REPAIR AND CLEANUP

- A. After installation, inspect all work for improper installation or damage.
- B. Operating fixtures must perform smoothly. Repair or replace any defective work as directed by the **Inspector** at the **Contractor's** expense. Repair work shall be undetectable.
- C. Clean the work area and remove all scrap and excess material from the site.

END OF SECTION – 16400 ELECTRICAL